

FIBER OPTIC NETWORK DESIGNER

PURPOSE AND NATURE OF WORK

Position is responsible for the fiber optic to the home and wholesale communication network design, construction, administration and documentation. Position may supervise technicians, and coordinate contractor services, while working with considerable independence under the Chief Communications Engineer.

ILLUSTRATIVE EXAMPLES OF WORK (Note: These examples are intended only to illustrate the various types of work performed by incumbents in this class. All of the duties performed by any one incumbent may not be listed, nor does any incumbent necessarily perform all of these duties.)

In cooperation and conformity with engineers, designs fiber optic projects according to established standards, assures drawings and documents are prepared, performs calculations, inspects construction in progress and makes recommendations on acceptance upon completion. Assures construction adheres to related data standards and naming conventions. Gathers technical requirements and information from customers and developers relating to the implementation of the service order and network design.

Works closely with customer, developers, marketing, and engineering to identify technical solutions to problems with network. Analyzes applications for efficiency, impact and results. Insures contractor and in house compliance with applicable standards, codes and regulations. Prepares equipment specifications and bid packages. Evaluates bids, administers construction contracts, supervises and participates in construction inspection, prepares change orders, recommends changes, and accepts work. Supervises and participates in programming, maintenance, and troubleshooting of the fiber to the home hardware and software. Performs related work as required.

NECESSARY KNOWLEDGES, ABILITIES, AND SKILLS

Thorough knowledge of the layout, characteristics, and location of the LUS fiber optic communication system.

Thorough knowledge of construction standards, specifications, and regulations affecting fiber optic projects.

Knowledge of engineering and design aspects of telecommunications infrastructure, facilities, and cable plant design/documentation.

Knowledge of technology and design of various band code circuits, Multiplexer circuits, and provisioning and testing optical circuits.

Knowledge of programming and maintenance of communication systems, including diagnostics, installation of equipment, and coordination of construction services.

Ability to work off marked-up drawings and to create drawings for wiring plans, elevation drawings, equipment racks, etc.

Ability to isolate and troubleshoot communications circuits problems.

Ability to identify and resolve potential problems that could result in delays and/or untimely sequencing of installations.

Ability to establish and maintain productive working relationships with public, employees, and elected officials.

DESIRABLE TRAINING AND EXPERIENCE

Completion of vocational school in electronics, telecommunications, or related field and substantial experience in the design, construction, and maintenance of fiber optic communication systems; or an equivalent combination of training and experience.